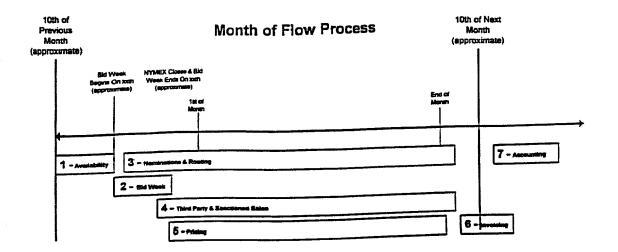
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× 100 **CLIENTS SERVERS** dbOvernet TCP/IP Socket Connection Middleware Processing Space Microsoft SQL Server V7.03 (DBMS Engine) Windows NT Server 4.0 Disk Windows Workstations EMS Database

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# Companies Subject Area (ERD)

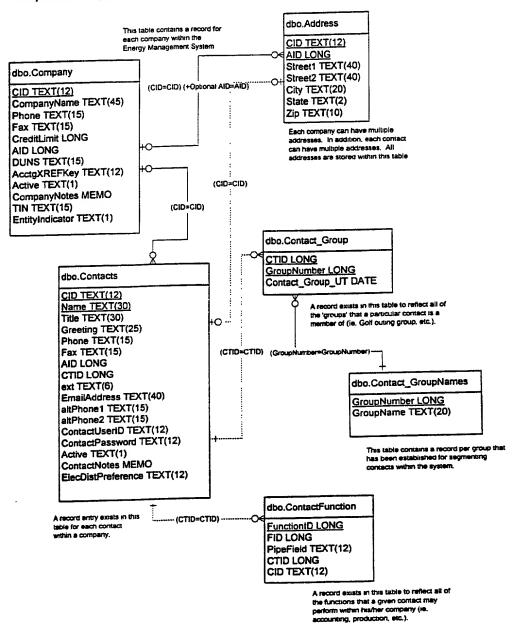


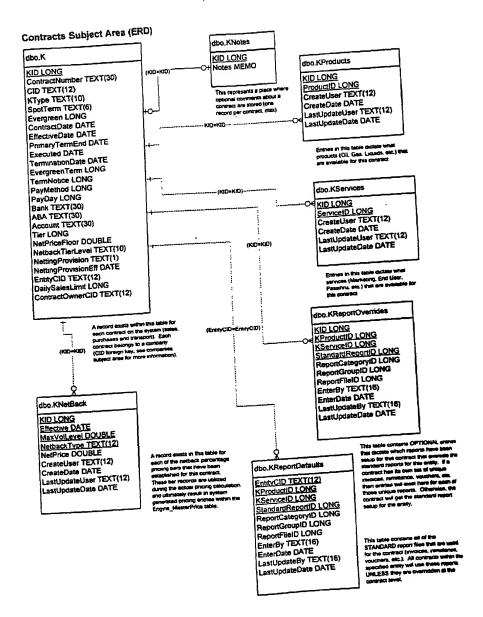
FIG. 3A

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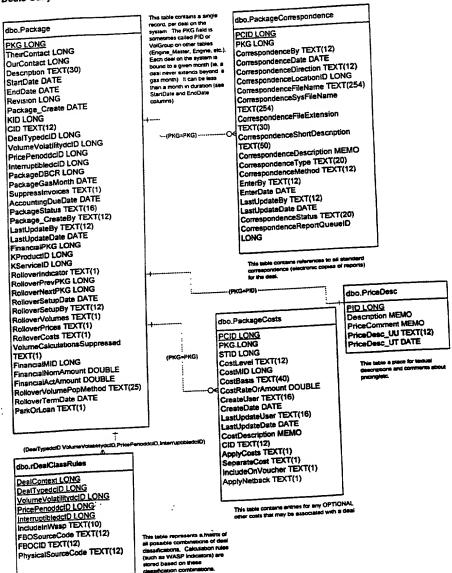


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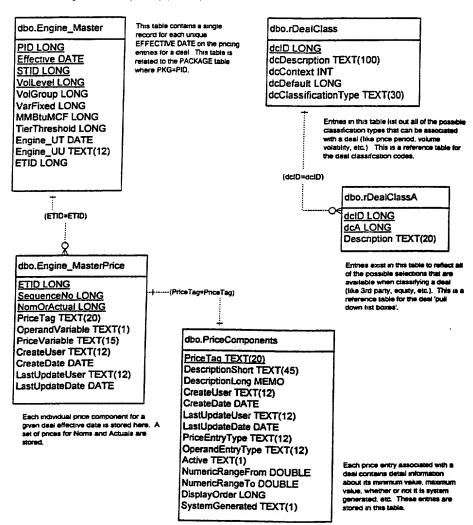
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#### Deals Subject Area (ERD) (2 of 2)



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Gas Inventory Subject Area (ERD) (1 of 2)

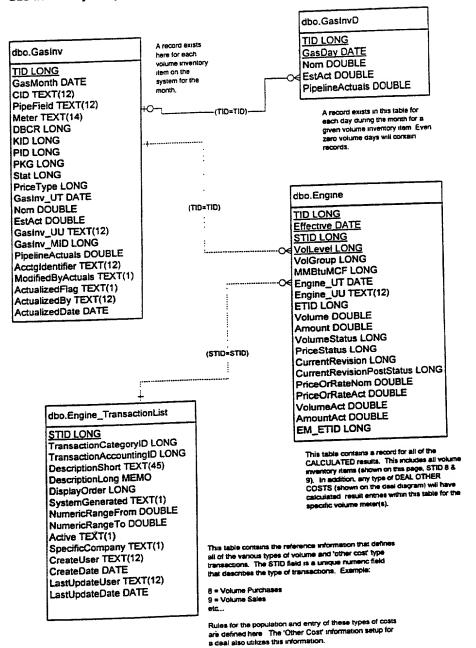


FIG. 3E

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#### Gas Inventory Subject Area (ERD) (2 of 2)

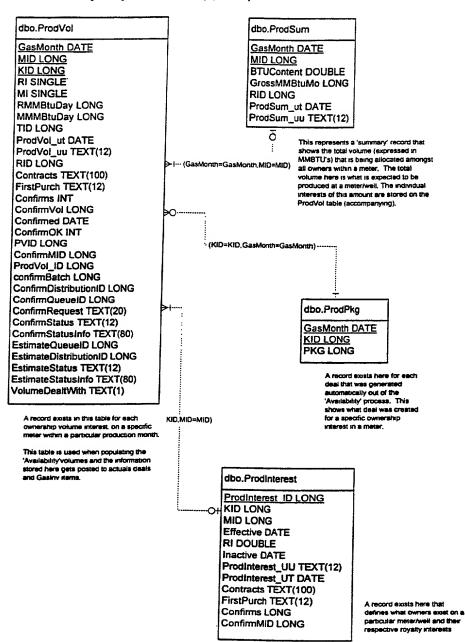


FIG. 3F

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## Operational Subject Area - 1 of 4 (ERD)

#### dbo.PrinterDef

PrinterNumber LONG
DisplayName TEXT(80)
ServerPrinterName TEXT(80)
InternalPrinter TEXT(1)

All printers defined in the system are stored in this table.

#### dbo.ApplicationMessages

ApplicationMessageID LONG
ApplicationMessageDate DATE
ApplicationMessageText TEXT(255)

This table contains application messages that normally only print to the server console (for example when a calculation is furning the messages are written here.

#### dbo.ExceptionCategories

ExceptionType TEXT(12)
ExceptionNo LONG
ExceptionShort TEXT(45)
ExceptionLong MEMO
CreateUser TEXT(12)
CreateDate DATE
LastUpdateUser TEXT(12)
LastUpdateDate DATE
ExceptionOrder LONG

This table contains record entries for all of the possible exception reason categories defined within the system. These reasons are based on the type of exception that occurs ("Dear, "Pricing", etc.).

that occurs ('Dear, 'Pricing', etc.).
(ExceptionType=ExceptionType, ExceptionNo=ExceptionNo)

#### dbo.LogTable

<u>LogEntry LONG</u> LogDateTime DATE LogInfo TEXT(254) This table is used primarily for debugging purposes and is not utilized byany screen or reporting process.

#### dbo.ExceptionList

ExceptionListID LONG
ExceptionType TEXT(12)
ExceptionKey LONG
ExceptionSequence LONG
ExceptionSequence LONG
ExceptionEvent TEXT(45)
ExceptionNo LONG
ExceptionBy TEXT(12)
ExceptionComments MEMO
CreateUser TEXT(12)
CreateDate DATE
LastUpdateUser TEXT(12)
LastUpdateUser DATE

This table contains the actual exception event entries. The ExceptionNey and sequence columns associate the exception to the entity based on type (iii. PKGID would be the like) for ExceptionType = 'DEAL').

## dbo.rGasMonth

GasMonth DATE
CurrentStatus TEXT(20)
CurrentSequence LONG
CreateUser TEXT(12)
CreateDate DATE
LastUpdateUser TEXT(12)
LastUpdateDate DATE
LockedUser TEXT(12)
LockedUser TEXT(12)
LockedDate DATE

One record exists in this table for every production month in the system. In addition, this table conteins the CURRENT status field (Availability, "Sales", 4th.).

dbo.rGasMonthStatus

GasMonth DATE
CurrentSequence LONG
Status TEXT(20)
CreateUser TEXT(12)
CreateDate DATE
Local Loc

CreateDate DATE

LastUpdateUser TEXT(12)

LastUpdateDate DATE

This table represents an 'audit' table that captures the production month information EVERYTIME the status is changed. This provides for detail analysis on how long production months are left in a particular status.

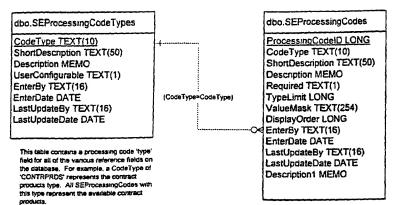
(GasMonth=GasMonth)

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### Operational Subject Area - 2 of 4 (ERD)



This table contains a record for each unique processing code on the system. For example a processingcoded=113 and a CodeType=CONTRPRDS\* has a short description of 'Gas'. This represents the gas contract product

#### dbo.SELocations

LocationID LONG
LocationUNCPath TEXT(254)
LocationName TEXT(30)
LocationDescription MEMO
LocationAutoCompress TEXT(1)
LocationOrder LONG
EnterBy TEXT(16)
EnterDate DATE
LastUpdateBy TEXT(16)
LastUpdateDate DATE

This table contains record entries for all of the locations (server paths) that are used within the system.

#### dbo.SEMessages

MessagesSubsystem TEXT(10)
MessagesID LONG
MessagesType TEXT(10)
MessageDescription MEMO
EnterBy TEXT(16)
EnterDate DATE
LastUpdateBy TEXT(16)
LastUpdateDate DATE

This table contains record antnes for all of the application messages (error, confirmational, informational, etc.).

#### dbo.SEAudit

AuditID LONG
AuditSys TEXT(30)
AuditEvent TEXT(30)
AuditEvent TEXT(16)
AuditDateTime DATE
AuditText TEXT(255)

This table contains record entires for autitable events that are captured within the system. Reports are written to review this information. An example is the "Login" attempts an/or the actualization attempts (by pipeffeld).

#### dbo.SElmages

ImageType TEXT(12)
ImageKey TEXT(16)
ImageScreen MEMO
ImageShortDescription TEXT(60)
ImageDescription MEMO
CreateDate DATE
CreateUser TEXT(16)
LastUpdateDate DATE
LastUpdateUser TEXT(16)

This table contains record entries for all standard-system graphic images. Letterheed logos, screen graphic logos, etc.

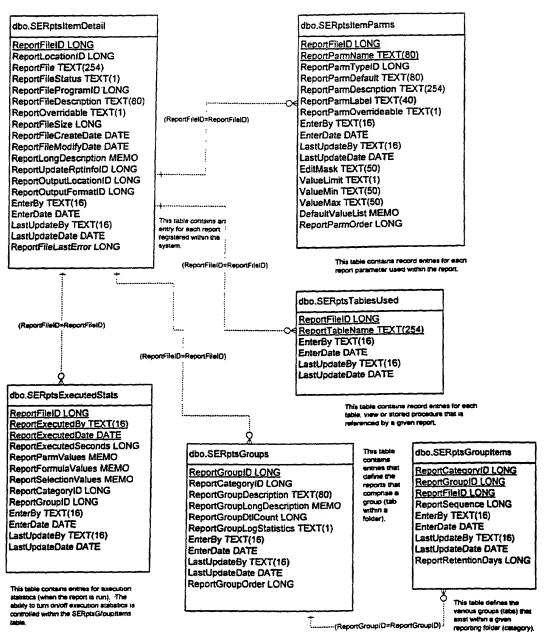
FIG. 3H

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#### Operational Subject Area - 3 of 4 (ERD)



**FIG. 31** 

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#### Operational Subject Area - 4 of 4 (ERD)

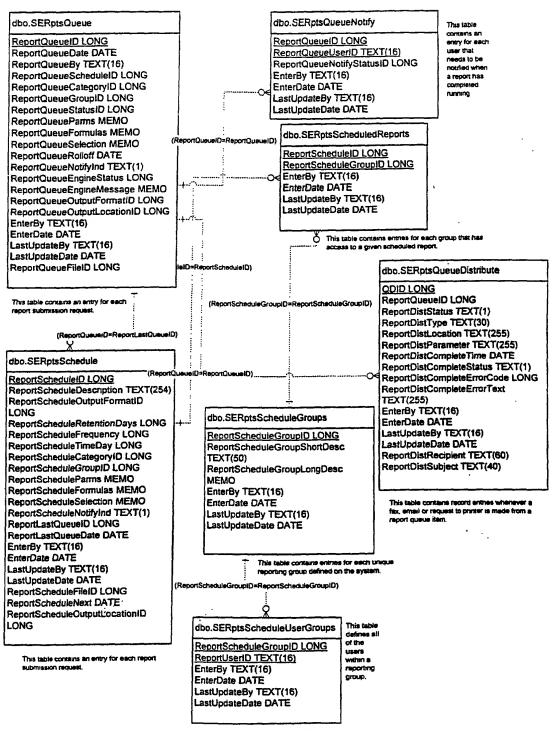


FIG. 3J

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Pipes & Meters Subject Area (ERD)

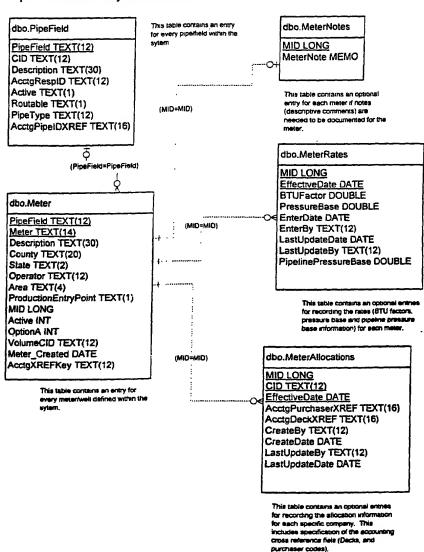


FIG. 3K

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## Pricing Subject Area (ERD)

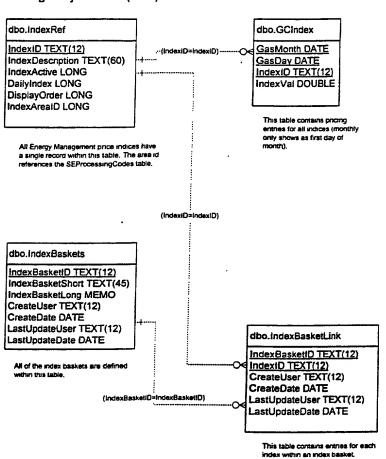


FIG. 3L

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# Routing Subject Area (ERD)

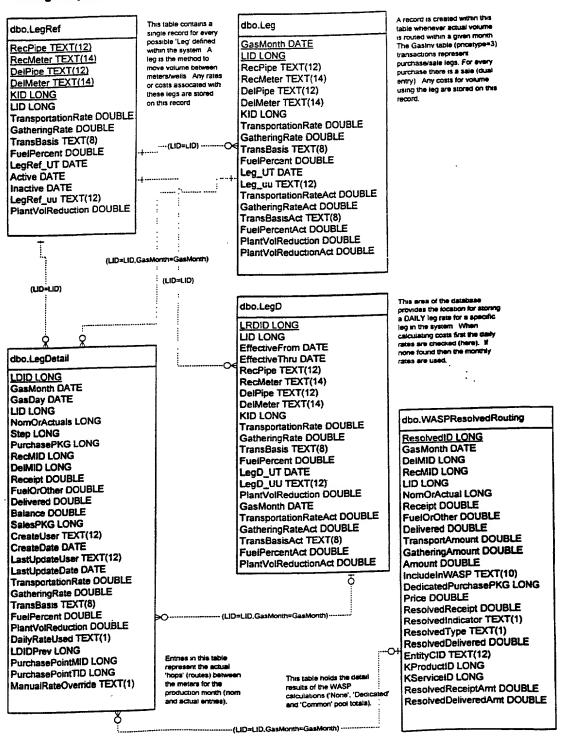


FIG. 3M

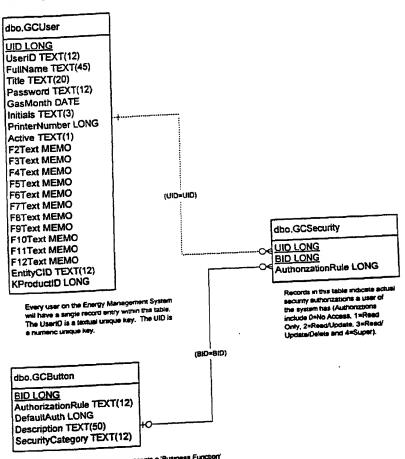
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# Security Subject Area (ERD)



Each record within this table represents a 'Business Function' within the Energy Management System. These records are used to establish security on the system. Each entry is categorized as either for 'Employee' or 'Company' in order to differentiate between employee access rules and customer excess rules.

FIG. 3N

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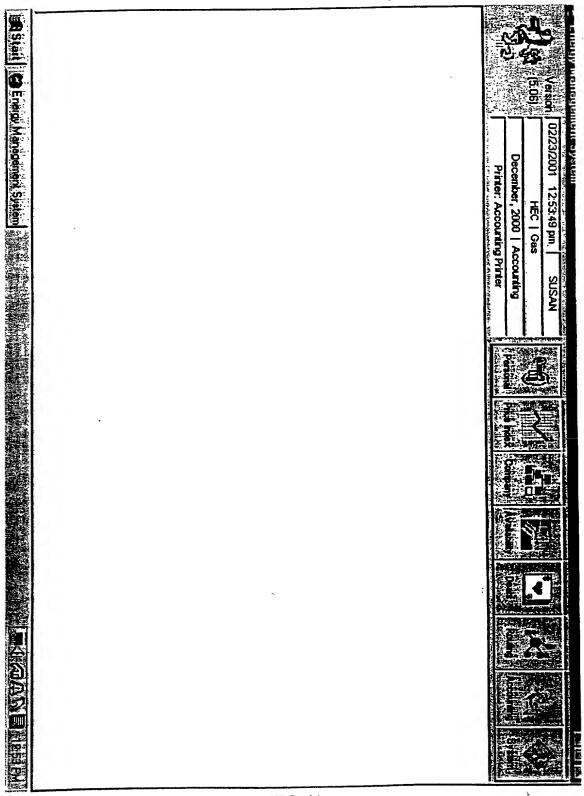


FIG. 4A

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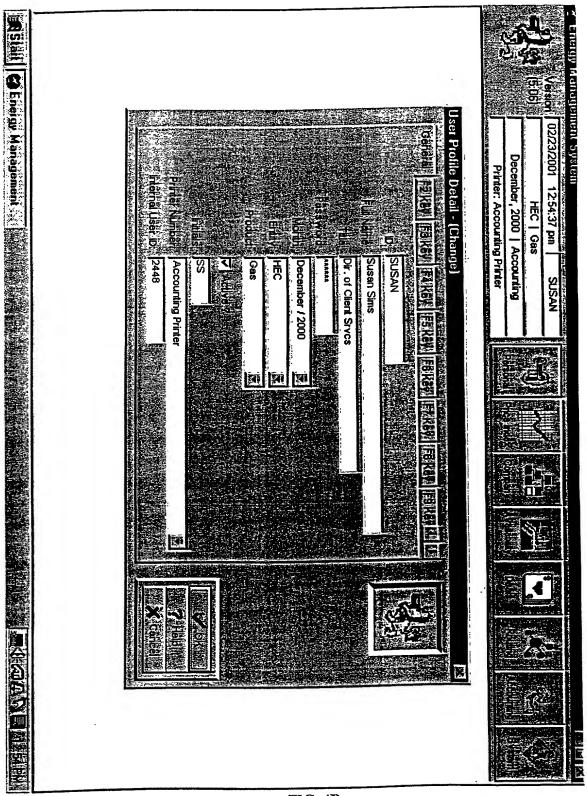


FIG. 4B

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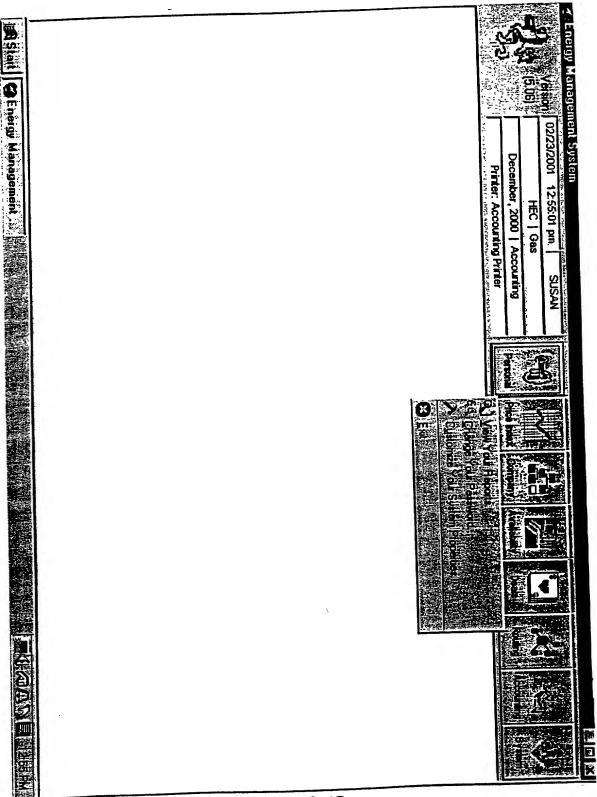
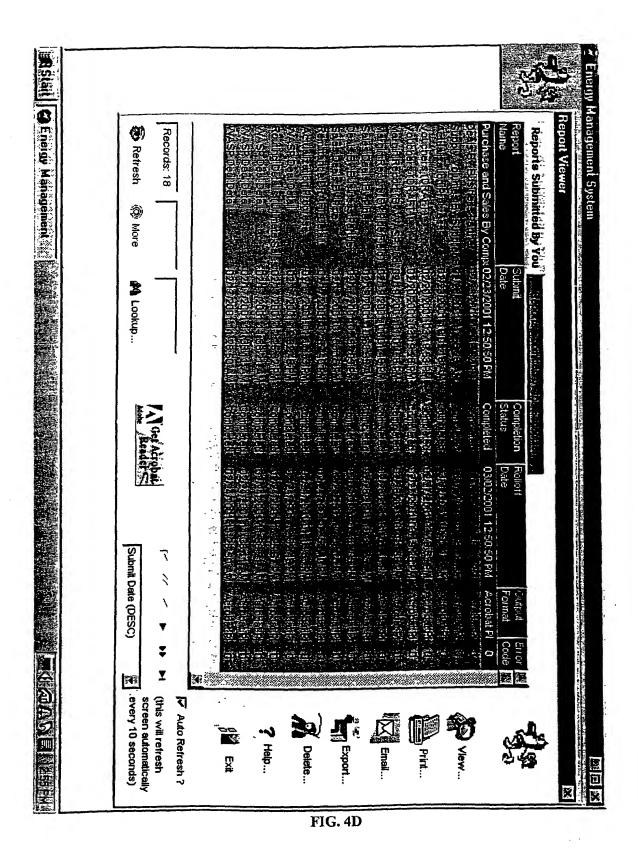


FIG. 4C

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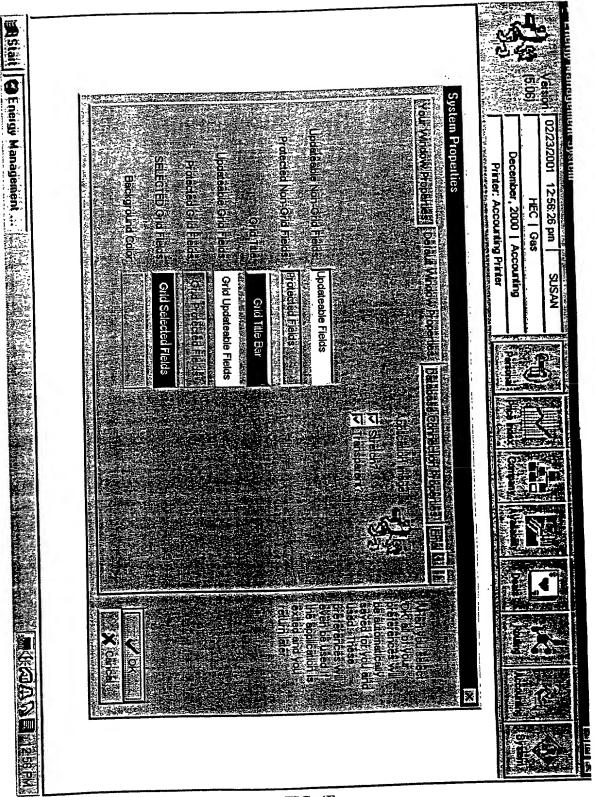


FIG. 4E

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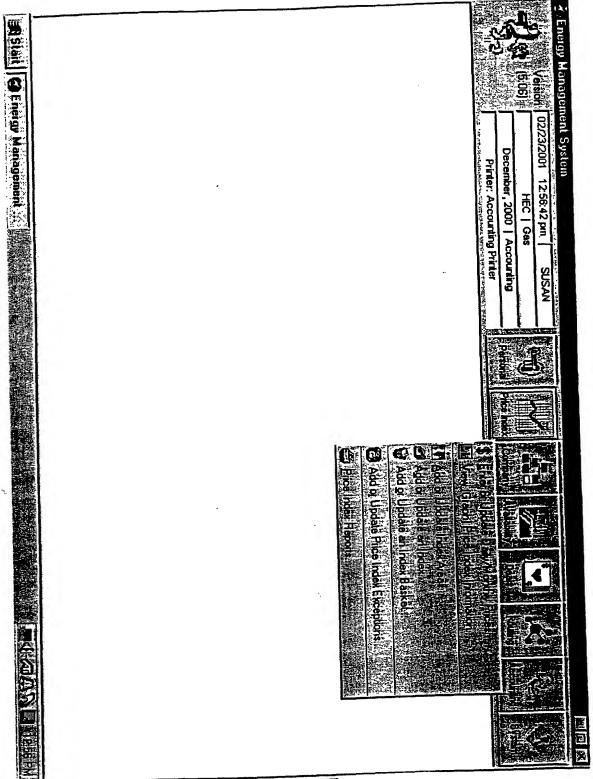


FIG. 4F

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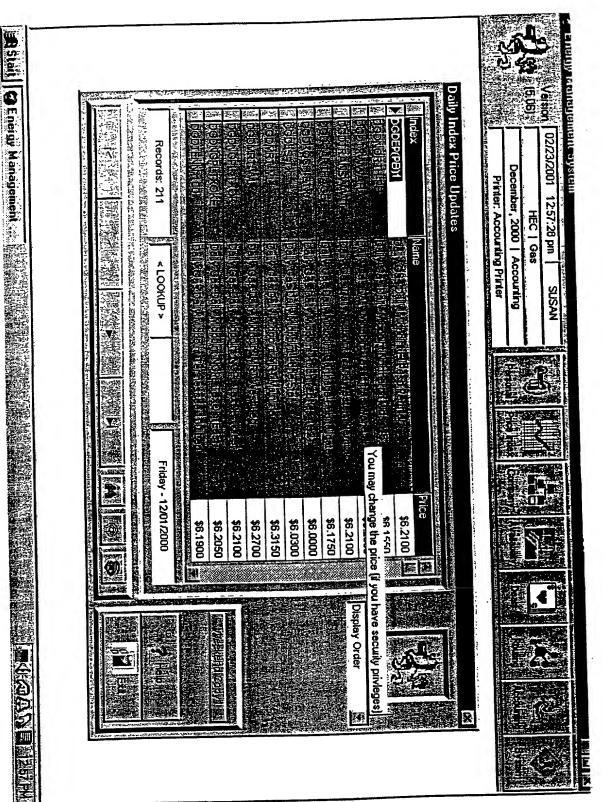
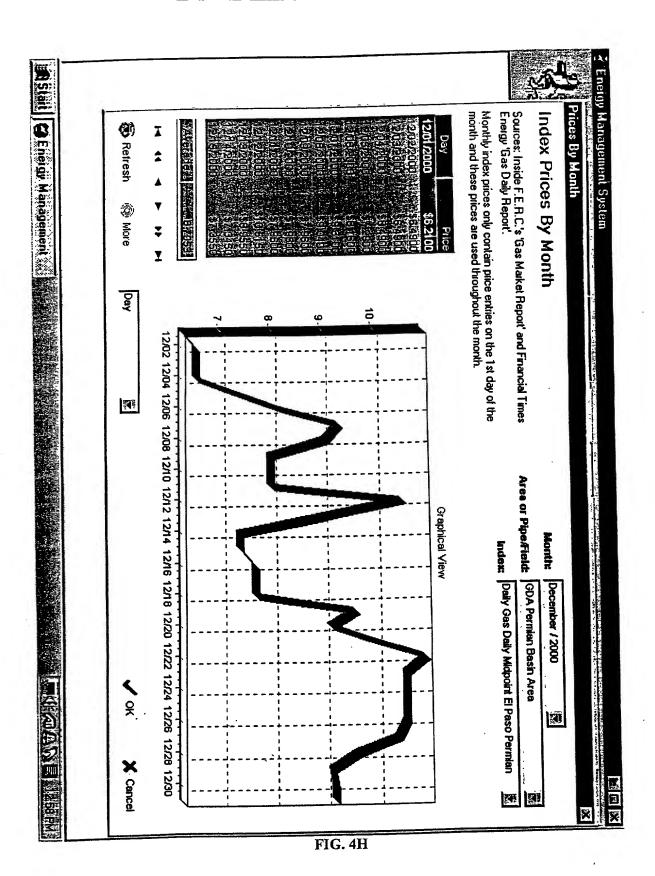


FIG. 4G

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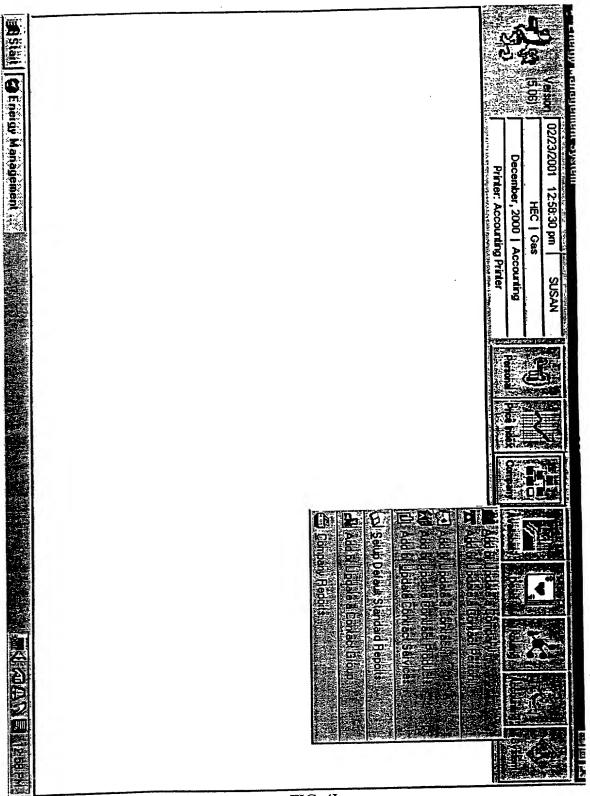
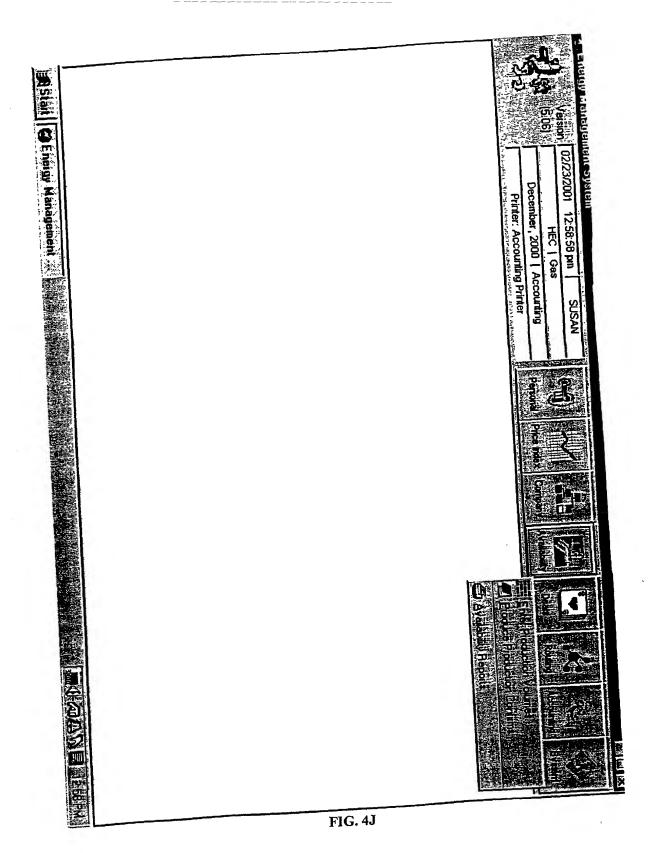


FIG. 4I

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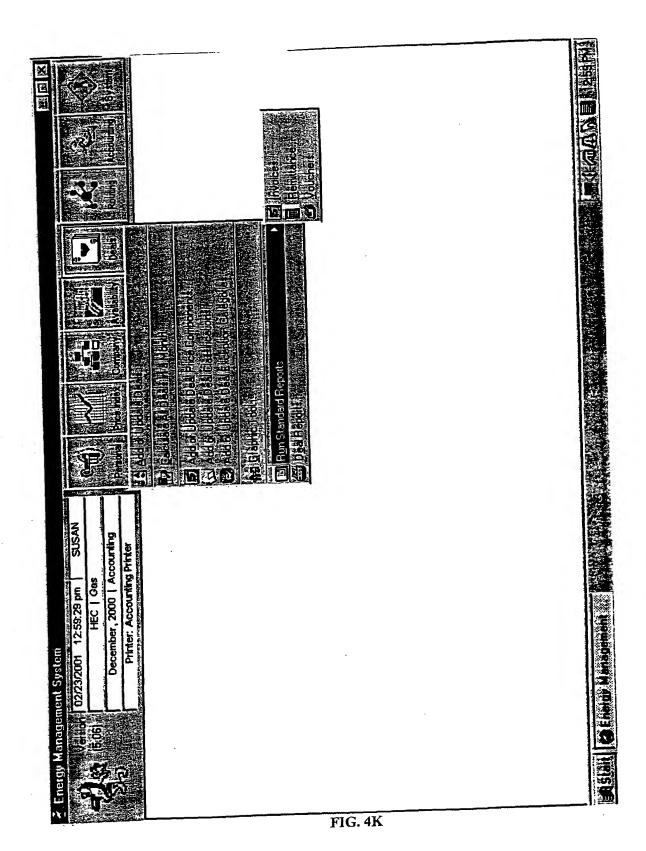
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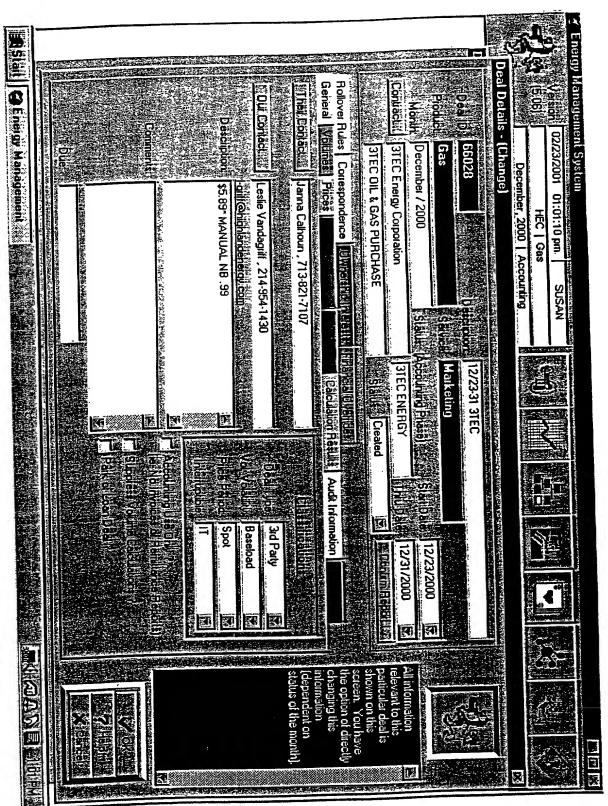
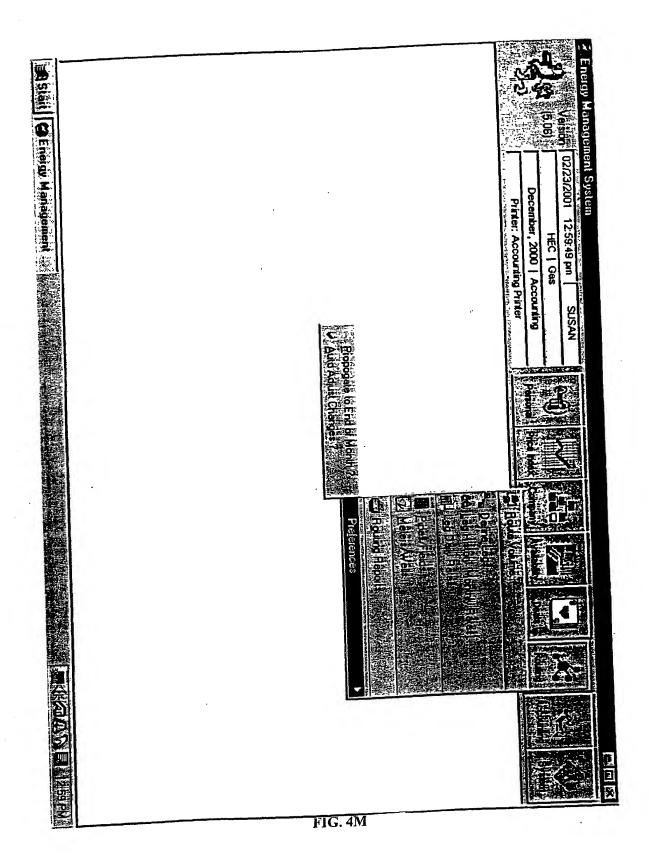


FIG. 4L

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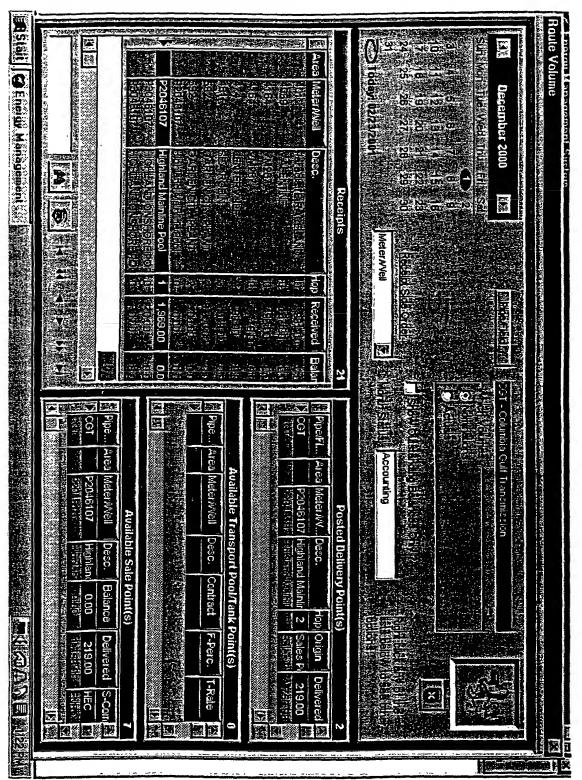


FIG. 4N

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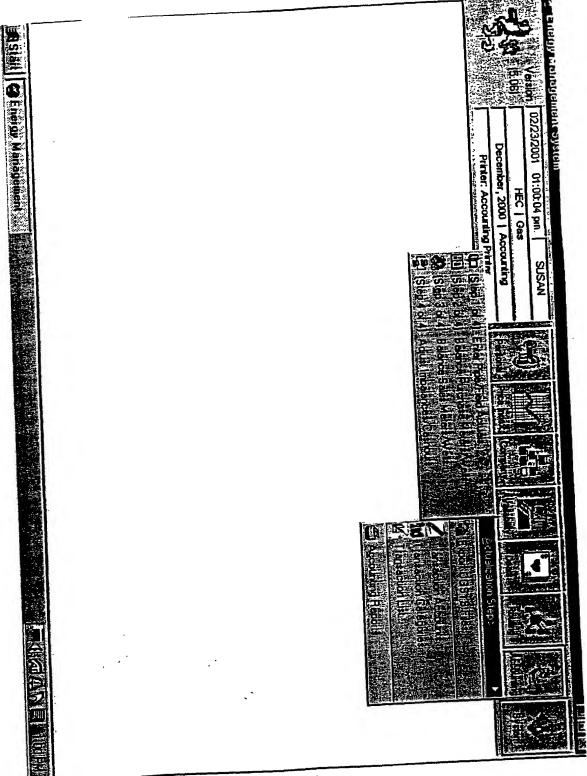
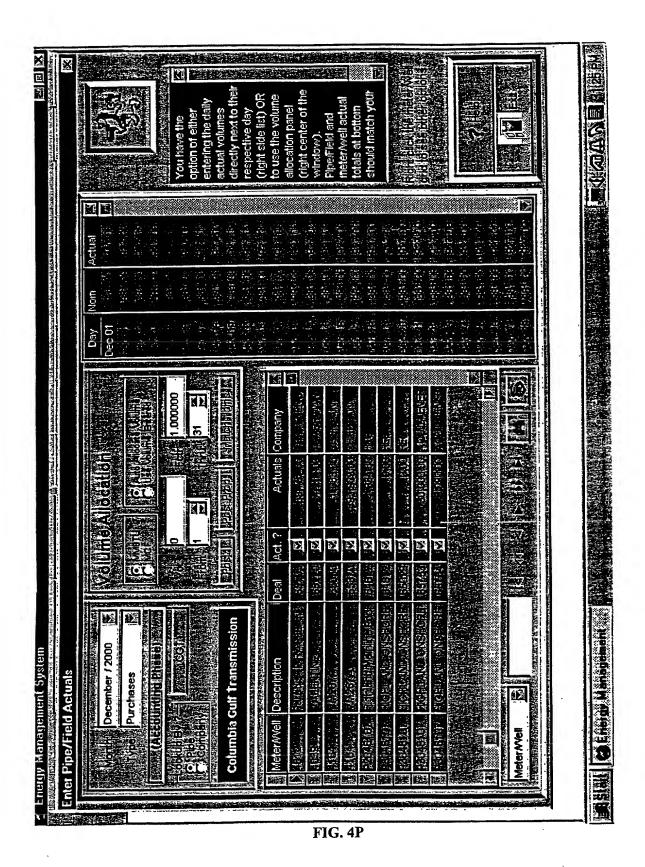


FIG. 40

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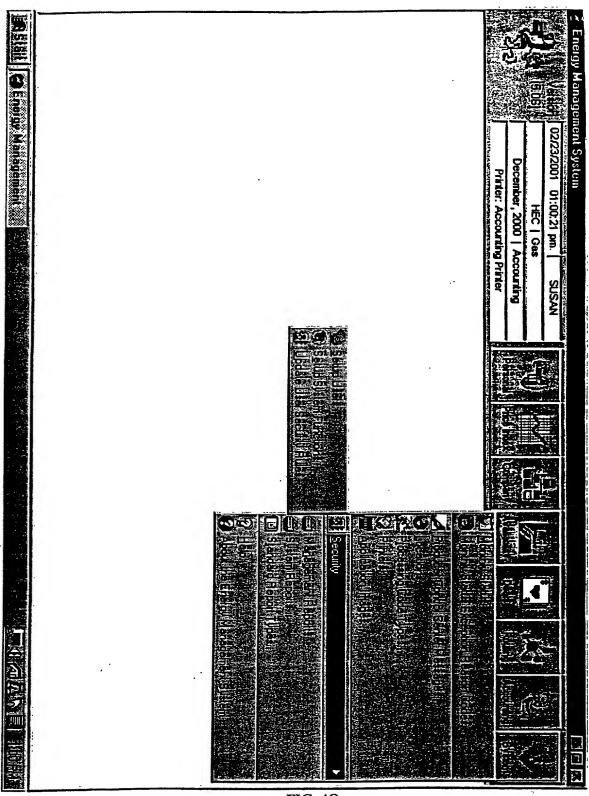


FIG. 4Q

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## **WASP Calculation Diagram**

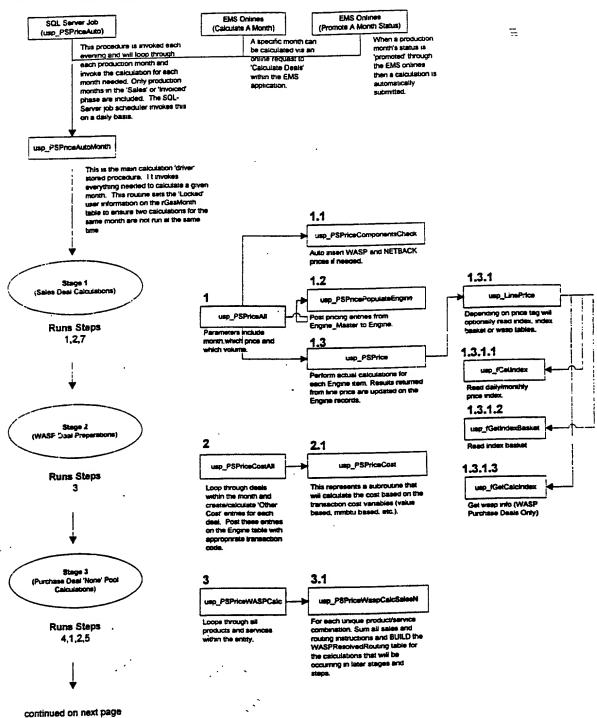


FIG. 5A

usp\_PSPriceWaspCalcResolveN

usp\_PSPriceWaspCaicResolveSalesN

HIGHLY ITERATIVE process that attempts to track all sales meters back to original purchase meters. The WASPResolvedRouting table is the primary table utilized here.

4.1.1

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#### WASP Calculation Diagram (2 of 2)

continued from previous page usp\_PSPnceWaspCalcResolveDnver This procedure will loop through each product and service and invoke the resolve routines for each unique Stage 4 (Purchase Deal 'Dedicated' Pool This procedure invokes the iterative combination process which loops back from all the sales points to originating purchase Calculations) **Runs Steps** 4,1,2 usp\_PSPriceWASPDivieOutProceedsN Stage 5 (Purchase Deal 'Common' Pool Calculations) Move any of the financial proceeds that were overridden to their respective deal OR WASP meters This takes the profit OR WASP meters. This cares me pro-ror (loss) and makes the adjustments. Only 3rd party deals can have their proceeds 'divided'. The primary table updated through this process is the WASPResolvedRouting table. **Runs Steps** 4,1,2 6 usp\_PSPnceTransportAll This routine will create all of the Gaslov (Transportation Cost Calculations) PriceType=3' inventory records and associated Engine (calculated) results. These system generated transport costs include transport, gathering, fuel and pvr. **Runs Steps** 6 7 usp\_PSPriceAnyNewInvoicesNeeded This routine only gets executed if the production month status is set to 'Invoiced' This routine will ensure that an

FIG. 5B

phase)

invoice number gets assigned if no number currently exists (for new sales entries introduced during the actualization